#### CLAIMS

# 1. A compound represented by formula (1):

$$\begin{array}{c}
A \\
\hline
N - CO - B - Z
\end{array}$$
(1)

(wherein,

R1 represents a hydrogen atom or a  $C_{1\text{--}6}$  alkyl group which may be substituted,

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:

(wherein

R2 and R3 represent a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1, a  $C_{1-6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted

by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more),

B represents a group represented by the following formula:

(wherein

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a  $C_{1-6}$  alkyl group, a  $C_{1-6}$  alkoxy group, a  $C_{2-6}$  alkenyl group, a  $C_{2-6}$  alkynyl group, a  $C_{2-6}$  alkenyloxy group, a  $C_{2-6}$  alkynloxy group, a  $C_{1-6}$  acyloxy group, or a  $C_{3-6}$  cycloalkyl group, or a phenyl group which may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more), and

Z represents a chroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzofuran-2-yl group which is substituted

by G2, a thiochroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzothiophene-2-yl group which is substituted by G2, or a 1,3-benzoxathiol-2-yl group which is substituted by G2,

G1 represents a cyano group, a formyl group, a hydroxyl group, an amino group, a dimethylamino group, or a halogen atom,

G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent), or a pharmaceutically acceptable salt thereof.

2. A compound or pharmaceutically acceptable salt according to claim 1, wherein z is a group represented by the following formula (A), (B) or (C):

$$R7$$
 $R7$ 
 $G2$ 
 $R10$ 
 $R8$ 
 $R14$ 
 $R11$ 
 $R12$ 
 $R15$ 
 $G2$ 
 $R14$ 
 $R13$ 
 $R17$ 
 $R16$ 
 $R17$ 
 $R17$ 
 $R19$ 
 $R19$ 

(wherein

\* represents an asymmetric carbon atom,

X1 represents an oxygen atom or a sulfur atom,

R7 to R17 each independently represents a hydrogen atom

or a  $C_{1-6}$  alkyl group, and

G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent)).

- 3. A compound or pharmaceutically acceptable salt according to claim 1 or 2, wherein A is 1-imidazolyl or 1-H-pyrazole-5-yl which is substituted at the fourth position on the benzene ring.
- 4. A production process of a compound represented by formula(1):

$$\begin{array}{c}
A \\
\hline
N-C0-B-Z \\
R1
\end{array}$$
(1)

(wherein,

R1 represents a hydrogen atom or a  $C_{1\text{--}6}$  alkyl group which may be substituted,

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:

R2 and R3 represent a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1, a  $C_{1-6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more),

B represents a group represented by the following formula:

#### (wherein

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a  $C_{1-6}$  alkyl group, a  $C_{1-6}$  alkoxy group, a  $C_{2-6}$  alkenyl group, a  $C_{2-6}$  alkynyl group, a  $C_{2-6}$  alkenyloxy group, a  $C_{2-6}$  alkynloxy group, a  $C_{1-6}$  acyloxy group, or a  $C_{3-6}$  cycloalkyl group, or a phenyl group which

may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more),

Z represents a chroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzofuran-2-yl group which is substituted by G2, a thiochroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzothiophene-2-yl group which is substituted by G2, or a 1,3-benzoxathiol-2-yl group which is substituted by G2,

G1 represents a cyano group, a formyl group, a hydroxyl group, an amino group, a dimethylamino group, or a halogen atom, and

G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent), comprising:

a step 1 in which a compound represented by the following formula (1')

$$\begin{array}{c}
A \\
N - CO - B - Z'
\end{array}$$
(1')

R1 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted,

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:

(wherein

R2 and R3 represent a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1, a  $C_{1-6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more)),

B represents a group represented by the following formula:

(wherein

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a  $C_{1-6}$  alkyl group, a  $C_{1-6}$  alkoxy group, a  $C_{2-6}$  alkenyl group, a  $C_{2-6}$  alkynyl group, a  $C_{2-6}$  alkenyloxy group, a  $C_{2-6}$  alkynloxy group, a  $C_{1-6}$  acyloxy group, or a  $C_{3-6}$  cycloalkyl group, or a phenyl group which may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more), and

Z' is represented by the following formula (A)', (B)', or (C)':

$$*$$
 $R7$ 
 $R0$ 
 $R11$ 
 $R11$ 
 $R12$ 
 $R15$ 
 $R15$ 
 $R15$ 
 $R10$ 
 $R11$ 
 $R12$ 
 $R11$ 
 $R12$ 
 $R13$ 
 $R17$ 
 $R17$ 
 $R17$ 
 $R18$ 
 $R19$ 
 $R1$ 

\* represents an asymmetric carbon atom,

X1 represents an oxygen atom or a sulfur atom,

R7 to R17 each independently represents a hydrogen atom or a  $C_{1-6}$  alkyl group, and

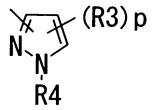
G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent)) is produced by reacting an amine compound represented by formula (2):

$$\begin{array}{ccc}
A & H \\
N & R1
\end{array}$$
(2)

(wherein

R1 represents a hydrogen atom or a  $C_{1\text{--}6}$  alkyl group which may be substituted, and

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:



R2 and R3 represent a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1, a  $C_{1-6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more)) with a compound represented by the following formula (3):

$$YOC-B-Z'$$
 (3)

(wherein

Y represents a hydroxyl group or a halogen atom,

B represents a group represented by the following formula:

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a  $C_{1-6}$  alkyl group, a  $C_{1-6}$  alkoxy group, a  $C_{2-6}$  alkenyl group, a  $C_{2-6}$  alkynyl group, a  $C_{2-6}$  alkenyloxy group, a  $C_{2-6}$  alkynloxy group, a  $C_{1-6}$  acyloxy group, or a  $C_{3-6}$  cycloalkyl group, or a phenyl group which may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different from each other, when k is 2 or more) and

Z' is represented by the following formula (A)', (B)', or (C)':

$$*$$
 $R10$ 
 $R10$ 

(wherein

\* represents an asymmetric carbon atom,

X1 represents an oxygen atom or a sulfur atom,

R7 to R17 each independently represents a hydrogen atom or a  $C_{1-6}$  alkyl group, and

G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent)); and

a step 2 in which the nitro compound produced in the step 1 is converted to an amino group using a reducing agent.

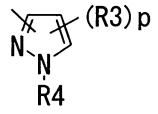
5. An antioxidant comprising as its active ingredient at least one compound represented by formula (1):

$$\begin{array}{c}
A \\
N - CO - B - Z
\end{array}$$
(1)

(wherein

R1 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted,

A represents an imidazolyl group or a pyrazolyl group represented by the following formulae:



R2 and R3 represent a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1,

R4 represents a hydrogen atom or a  $C_{1-6}$  alkyl group which may be substituted by G1, a  $C_{1-6}$  alkylcarbonyl group which may be substituted by G1, or a benzoyl group which may be substituted by G1,

n represents 0 or an integer of 1 to 3,

p represents 0 or an integer of 1 or 2, and

R2 and R3 may be identical to each other, or different from each other, when n and p are 2 or more)),

B represents a group represented by the following formula:

(wherein

R5 and R6 each independently represents a hydrogen atom, a cyano group, a hydroxyl group, a halogen atom, a  $C_{1-6}$  alkyl

group, a  $C_{1-6}$  alkoxy group, a  $C_{2-6}$  alkenyl group, a  $C_{2-6}$  alkynyl group, a  $C_{2-6}$  alkenyloxy group, a  $C_{2-6}$  alkynloxy group, a  $C_{1-6}$  acyloxy group, or a  $C_{3-6}$  cycloalkyl group, or a phenyl group which may have a substituent,

k represents 0 or an integer of 1 to 15, and

R5 and R6 may be identical to each other, or different

from each other, when k is 2 or more),

Z represents a chroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzofuran-2-yl group which is substituted by G2, a thiochroman-2-yl group which is substituted by G2, a 2,3-dihydrobenzothiophene-2-yl group which is substituted by G2, or a 1,3-benzoxathiol-2-yl group which is substituted by G2,

G1 represents a cyano group, a formyl group, a hydroxyl group, an amino group, a dimethylamino group, or a halogen atom, and

G2 is represented by the following formula: NHR (wherein R represents a hydrogen atom, a  $C_{1-6}$  alkylcarbonyl group, or a benzoyl group which may have a substituent) or a pharmaceutically acceptable salt thereof.

6. An antioxidant according to claim 5, wherein in formula
(1) z is represented by the following formula (A), (B), or (C):

\* represents an asymmetric carbon atom,

X1 represents an oxygen atom or a sulfur atom,

R7 to R17 each independently represents a hydrogen atom or a  $C_{1-6}$  alkyl group, and

G2 is represented by the following formula: NHR  $(\text{wherein R represents a hydrogen atom, a $C_{1-6}$ alkylcarbonyl group,} \\ \text{or a benzoyl group which may have a substituent)}).$ 

- 7. A kidney disease, cerebrovascular or cardiovascular disease treatment agent characterized by comprising the antioxidant according to claim 6.
- 8. A cerebral infarction treatment agent characterized by comprising the antioxidant according to claim 6.
- 9. A retinal oxidation disorder inhibitor characterized by comprising the antioxidant according to claim 6.

- 10. A retinal oxidation disorder inhibitor according to claim9 for age-related macular degeneration or diabetic retinopathy.
- 11. A lipoxygenase inhibitor characterized by comprising the antioxidant according to claim 6.
- 12. A 20-hydroxyeicosatetraenoic acid (20-HETE) synthase inhibitor characterized by comprising the antioxidant according to claim 6.